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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,724	09/29/2006	Masahiro Tsushima	107156-00350	9400

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EXAMINER	
GUARINO, RAHEL	
ART UNIT	PAPER NUMBER
2611	

NOTIFICATION DATE	DELIVERY MODE
02/03/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DCIPDocket@arentfox.com
IPMatters@arentfox.com
Patent_Mail@arentfox.com

Office Action Summary	Application No.	Applicant(s)	
	10/594,724	TSUSHIMA, MASAHIRO	
	Examiner	Art Unit	
	RAHEL GUARINO	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *9/21/2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to communication filed on 9/21/2009.

Response to Arguments

2. Applicant's arguments, with respect to the rejections of claims 10-16 under 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground of rejection is made in view of Freeman et al. US 2002/0129374 in view of Grau et al. US 5,862,451

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman et al. US 2002/0129374 in view of Grau et al. US 5,862,451

Re claim 10, Freeman discloses a digital receiving apparatus comprising (fig.4): an information separating unit *(demux 106A/B)* for reproducing a stream of demodulation signal *(a multiplexed signal that contains video, audio and data),* and separating it into stream signals on multiplexed respective channels for output (*multiplexed signal are separated into respective devices; para#89 lines 1-5 and para#84 lines 5-13);*a decoding unit *(110 A/B)* for decoding and outputting said stream signals *(para#116);* a control unit *(microprocessor;108)* for switching and controlling a stream signal for the decoding unit to decode out of the stream signals on said respective channels (*para#87; the microprocessor controls the selection of the RF channel that is demodulated by the demodulator 102 and para#83 lines 5-10);* and a storing unit *(120)* for storing matching information the data types of the stream signals on the respective channels *(para#83 RAM/ROM stores user's input and profile information),*wherein said control unit determines the matching relationship between said physical information during reception (*user's input and profile information; para#103)* and the data type of the stream signal on a channel selected out of said channels based on said matching information *(para#107;during reception the switching occurs during the gap (340). By encoding at a lower rate that the capacity, extra time is creates at GOP (group of pictures)* and switches *(seamless switching)* to the stream signal on another channel *(para#190; seamless switching from digital data stream in*

channel A to another digital data stream channel B) and makes said decoding unit *(decoder;572)* decode it when the control unit *(microprocessor)* determines that said physical information (*based MPEG schemes)* during reception and the data type of the stream signal on said selected channel do not conform to a predetermined relationship *(para#194; the microprocessor sends a commands to digital demux/decoder which of the digital stream signals need to strip out the composite signals from channel B. The selected signals are forwarded to the decoder (574/575). The decoder switches from the current displayed to newly selected signal and loads the stream from the buffer).*

Freeman does not disclose channel selection based on quality measurements.

In the same field of endeavor, however, Grau teaches channel selection based on quality measurements *(col. 11 lines 21-29; the quality is selected by CAU, or computer program executing on a data processing connected to communication system)*

Therefore, taking the combined teaching of Freeman and Grau as a whole would have been rendered obvious to one skilled in the art to modify Freeman to perform the channel selection based on quality measurements as taught by Grau for the benefit of eliminating interference (col. 8 lines 4-13).

Re claim 11, the modified invention as claimed in claim claim 10, wherein the stream signal on said another channel is a stream signal (*digital data stream channel A)* of a data type different from the data type of the stream signal on said selected channel (*digital data stream channel B;para#192,* Freeman*)*.

Re claim 12, the modified invention as claimed in claim 10, wherein the stream

signal on said another channel has a data type conforming to a predetermined relationship with said physical information during reception *(para#194; the microprocessor sends a commands to digital demux/decoder which of the digital stream signals need to strip out the composite signals from channel B. The selected signals are forwarded to the decoder (574/575). The decoder switches from the current displayed to newly selected signal and loads the stream from the buffer,* Freeman*)*

Re claim 13, the modified invention as claimed in claim 10, wherein said physical information is a bit error rate (col. 7 lines 31-40 and col. 15 lines 64-67 Grau).

Re claim 14, the modified invention as claimed in claim 10, wherein if said control unit *(microprocessor)* determines that said physical information during reception (*user's input and profile information; para#103)* and the data type of the stream signal of said selected channel do not conform to a predetermined relationship *(para#194; the microprocessor sends a commands to digital demux/decoder which of the digital stream signals need to strip out the composite signals from channel B. The selected signals are forwarded to the decoder (574/575). The decoder switches from the current displayed to newly selected signal and loads the stream from the buffer)*, the control unit *(microprocessor)* searches for a stream signal on said another channel (*digital data stream channel B;para#192)*, having a data type conforming to the predetermined relationship with said physical information during reception (*MPEG schemes;para#193)*, based on said matching information, and switches to the stream signal on said different channel based on the search result (*The decoder switches from the current displayed to newly selected signal and loads the stream from the buffer;para#194,* Freeman*)*.

Re claim 15, Freeman discloses a method of reception of a digital receiving apparatus, comprising (fig.4):

an information separating step of *(demux 106A/B)* for reproducing a stream of demodulation signal *(a multiplexed signal that contains video, audio and data),* and separating it into stream signals on multiplexed respective channels for output (*;multiplexed signal are separated into respective devices; para#89 lines 1-5 and para#84 lines 5-13);*a decoding step of *(110 A/B)* for decoding and outputting said stream signals *(para#116);* a control step of *(microprocessor;108)* for switching and controlling a stream signal for the decoding unit to decode out of the stream signals on said respective channels (*para#87; the microprocessor controls the selection of the RF channel that is demodulated by the demodulator 102 and para#83 lines 5-10);* and a storing step of *(120)* for storing matching information the data types of the stream signals on the respective channels *(para#83 RAM/ROM stores user's input and profile information),*wherein said control step of determines the matching relationship between said physical information during reception (*user's input and profile information; para#103)* and the data type of the stream signal on a channel selected out of said channels based on said matching information *(para#107;during reception the switching occurs during the gap (340). By encoding at a lower rate that the capacity, extra time is creates at GOP (group of pictures)* and switches *(seamless switching)* to the stream signal on another channel *(para#190; seamless switching from digital data stream in channel A to another digital data stream channel B)* and makes said decoding step of *(decoder;572)* decode it when the control unit *(microprocessor)* determines that said

physical information (*based MPEG schemes)* during reception and the data type of the stream signal on said selected channel do not conform to a predetermined relationship *(para#194; the microprocessor sends a commands to digital demux/decoder which of the digital stream signals need to strip out the composite signals from channel B. The selected signals are forwarded to the decoder (574/575). The decoder switches from the current displayed to newly selected signal and loads the stream from the buffer).*

Freeman does not disclose channel selection based on quality measurements.

In the same field of endeavor, however, Grau teaches channel selection based on quality measurements *(col. 11 lines 21-29; the quality is selected by CAU, or computer program executing on a data processing connected to communication system)*

Therefore, taking the combined teaching of Freeman and Grau as a whole would have been rendered obvious to one skilled in the art to modify Freeman to perform the channel selection based on quality measurements as taught by Grau for the benefit of eliminating interference (col. 8 lines 4-13).

Re claim 16, Freeman discloses a computer program to be executed by a computer arranged in a digital receiving apparatus (*fig.4;para#70*), the computer program comprising: an information separating step of *(demux 106A/B)* for reproducing a stream of demodulation signal *(a multiplexed signal that contains video, audio and data),* and separating it into stream signals on multiplexed respective channels for output (*;multiplexed signal are separated into respective devices; para#89 lines 1-5 and para#84 lines 5-13);*a decoding step of *(110 A/B)* for decoding and outputting said

stream signals *(para#116);* a control step of *(microprocessor;108)* for switching and controlling a stream signal for the decoding unit to decode out of the stream signals on said respective channels (*para#87; the microprocessor controls the selection of the RF channel that is demodulated by the demodulator 102 and para#83 lines 5-10);* and a storing step of *(120)* for storing matching information the data types of the stream signals on the respective channels *(para#83 RAM/ROM stores user's input and profile information),*wherein said control unit determines the matching relationship between said physical information during reception (*user's input and profile information; para#103)* and the data type of the stream signal on a channel selected out of said channels based on said matching information *(para#107;during reception the switching occurs during the gap (340). By encoding at a lower rate that the capacity, extra time is creates at GOP (group of pictures)* and switches *(seamless switching)* to the stream signal on another channel *(para#190; seamless switching from digital data stream in channel A to another digital data stream channel B)* and makes said decoding step of *(decoder;572)* decode it when the control unit *(microprocessor)* determines that said physical information (*based MPEG schemes)* during reception and the data type of the stream signal on said selected channel do not conform to a predetermined relationship *(para#194; the microprocessor sends a commands to digital demux/decoder which of the digital stream signals need to strip out the composite signals from channel B. The selected signals are forwarded to the decoder (574/575). The decoder switches from the current displayed to newly selected signal and loads the stream from the buffer).*

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Re claim 17, a recording medium (ROM/RAM) containing the computer program according to claim 16 (para#70, Freeman).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rahel Guarino whose telephone number is (571)270-1198. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Payne David can be reached on 571-272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rahel Guarino/
Examiner, Art Unit 2611

/David C. Payne/

Supervisory Patent Examiner, Art Unit 2611